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Table 1: Khorana score (adapted from Khorana et al, 2008)

Patient characteristic	Score
Site of cancer	
• Very high risk (stomach, pancreas)	2
• High risk (lung, lymphoma, gynaecological, bladder, testicular)	1
Pre-chemotherapy platelet count 350 x10 ⁹ or more	1
Haemoglobin level less than 100g/l or use of red cell growth factors	1
Pre-chemotherapy leucocyte count more than 11 x 10 ⁹ /L	1
BMI 35kg/m ² or more	1

Table 2: Patient and treatment characteristics of patients included in the VTE risk factor analysis

	Pancreatic N=87	Colorectal N=205	Endometrial N=154	Ovarian N=193	Cervical N=91
Age	(n=84)	(n=199)	(n=151)	(n=190)	(n=91)
mean (SD)	66.2 (11.3)	64.0 (14.4)	67.5 (10.7)	60.2 (15.1)	48.9 (16.1)
[range]	[37, 91]	[18, 92]	[34, 92]	[15, 97]	[24, 90]
Chemotherapy	(n=85)	(n=201)	(n=154)	(n=192)	(n=91)
n (%)					
Yes	56 (64.4)	116 (56.6)	44 (28.6)	148 (76.7)	51 (56.0)
No	29 (33.3)	85 (41.5)	110 (71.4)	44 (22.8)	40 (44.0)
Indwelling lines	(n=78)	(n=204)	(n=154)	(n=192)	(n=91)
n (%)					
Yes	23 (26.4)	62 (30.2)	8 (5.2)	22 (11.4)	6 (6.6)
No	55 (63.2)	142 (69.3)	146 (94.8)	170 (88.1)	85 (93.4)
Radiotherapy	(n=86)	(n=205)	(n=154)	(n=171)	(n=91)
n (%)					
Yes	13 (14.9)	39 (19.0)	94 (61.0)	5 (2.6)	60 (65.9)
No	73 (83.9)	166 (81.0)	60 (39.0)	166 (86.0)	31 (34.1)
CRP	(n=60)	(n=67)	(n=23)	(n=61)	(n=16)
median (IQR)	14.9 (7, 50.5)	5.7 (1.9, 34)	11 (4.4, 40.4)	17.9 (7, 48)	20.4 (4.5, 66)
[range]	[0, 199]	[0.6, 253]	[0, 231]	[0.7, 214]	[0, 207]
CRP	(n=60)	(n=67)	(n=23)	(n=61)	(n=16)
n (%)					
>5.0 mg/l (high risk)	48 (55.2)	35 (17.1)	17 (11.0)	51 (26.4)	11 (12.1)
≤5.0 mg/l (low risk)	12 (13.8)	32 (15.6)	6 (3.9)	10 (5.2)	5 (5.5)
Surgery	(n=87)	(n=205)	(n=153)	(n=193)	(n=90)
n (%)					

Yes	15 (17.2)	156 (76.1)	144 (93.5)	165 (85.5)	82 (90.1)
No	72 (82.8)	49 (23.9)	9 (5.8)	28 (14.5)	8 (8.8)
Platelet count <i>mean (SD)</i> <i>[range]</i>	(n=87) 270.0 (97.9) [99, 510]	(n=205) 303.5 (115.0) [81, 754]	(n=154) 319.1 (139.5) [124, 1239]	(n=193) 362.8 (138.7) [31, 920]	(n=91) 308.2 (106.3) [127, 682]
Platelet count <i>n (%)</i> ≥350 (high risk) <350 (low risk)	(n=87) 23 (26.4) 64 (73.6)	(n=205) 51 (24.9) 154 (75.1)	(n=154) 46 (29.9) 108 (70.1)	(n=193) 86 (44.6) 107 (55.4)	(n=91) 27 (29.7) 64 (70.3)
Haemoglobin (g/L) <i>mean (SD)</i> <i>[range]</i>	(n=87) 117.9 (18.5) [57, 163]	(n=205) 122.6 (23.7) [10, 168]	(n=154) 123.3 (23.1) [10, 159]	(n=193) 72.7 (55.0) [5.2, 159]	(n=91) 97.9 (48.7) [6.9, 160]
Haemoglobin <i>n (%)</i> <100g/L (high risk) ≥100g/L (low risk)	(n=87) 10 (11.5) 77 (88.5)	(n=205) 26 (12.7) 179 (87.3)	(n=154) 16 (10.4) 138 (89.6)	(n=193) 95 (49.2) 98 (50.8)	(n=91) 31 (34.1) 60 (65.9)
Leukocyte <i>mean (SD)</i> <i>[range]</i>	(n=87) 8.8 (3.3) [2.1, 23]	(n=205) 8.0 (3.3) [3.5, 32]	(n=154) 8.6 (3.2) [3.5, 30.8]	(n=193) 9.3 (9.5) [2.1, 132]	(n=91) 8.4 (3.5) [2.7, 22.4]
Leukocyte <i>n (%)</i> >11 (high risk) ≤11 (low risk)	(n=87) 21 (24.1) 66 (75.9)	(n=205) 23 (11.2) 182 (88.8)	(n=154) 25 (16.2) 129 (83.8)	(n=193) 29 (15.0) 164 (85.0)	(n=91) 17 (18.7) 74 (81.3)
BMI <i>n (%)</i> <35 (low risk) ≥35 (high risk)	(n=77) 75 (86.2) 2 (2.3)	(n=197) 192 (93.7) 5 (2.4)	(n=152) 135 (87.7) 17 (11.0)	(n=190) 179 (92.8) 11 (5.7)	(n=90) 83 (91.2) 7 (7.7)
Stage of cancer* <i>n (%)</i> Early Advanced	(n=87) 12 (13.8) 75 (86.2)	(n=196) I-III: 162 (79.0) IV: 34 (16.6)	(n=148) I-II: 106 (68.8) III-IV: 42 (27.3)	(n=190) I-II: 59 (30.6) III-IV: 131 (67.9)	
Khorana score** <i>n (%)</i> 0 1 2 3 4	(n=82) - - 37 (45.1) 37 (45.1) 8 (9.8)	(n=203) 136 (67.0) 35 (17.2) 30 (14.8) 2 (1.0) -	(n=154) - 78 (50.7) 52 (33.8) 20 (13.0) 4 (2.6)	(n=193) - 46 (23.8) 84 (43.5) 52 (26.9) 11 (5.7)	(n=91) - 42 (46.2) 24 (26.4) 17 (18.7) 8 (8.8)
Khorana score** (bin) <i>n (%)</i>	(n=82)	(n=203)	(n=154)	(n=193)	(n=91)

≥3 (high risk)	45 (54.9)	2 (1.0)	24 (15.6)	63 (32.6)	25 (27.5)
<3 (low risk)	37 (45.1)	201 (99.0)	130 (84.4)	130 (67.4)	66 (72.5)

SD: standard deviation; IQR: inter-quartile range; bin: binary

*Early and advanced stages of cancer for pancreatic patients are defined as curative and non-curative surgery respectively

**Khorana score not calculated for patients with abdominal VTE

Table 3: Risk factors of potentially preventable VTE by cancer type; univariate associations (χ^2) and stepwise regression using backward elimination

Risk factors for potentially preventable VTE	Pancreatic N=87		Colorectal N=205		Endometrial N=154		Ovarian N=193	
	<i>p-value</i>	<i>Stepwise selection</i>	<i>p-value</i>	<i>Stepwise selection</i>	<i>p-value</i>	<i>Stepwise selection</i>	<i>p-value</i>	<i>Stepwise selection</i>
Chemotherapy (yes/no)	0.061	Sig.	<0.001*	NS	0.035*	NS	0.252	NS
Indwelling lines (yes/no)	0.024*	NS	<0.001*	Sig.	0.002*	Sig.	0.015*	Sig.
Radiotherapy (yes/no)	0.746	NS	0.629	NS	0.572	NS	0.498	NS
CRP (>5.0 mg/l)	0.638	-	0.594	-	0.379	-	0.481	-
Surgery (yes/no)	0.043*	NS	0.221	NS	<0.001*	Sig.	0.011*	Sig.
Platelet count (≥350)	0.162	NS	0.270	NS	0.045*	NS	0.769	NS
Haemoglobin level (<100g/L)	0.061	Sig.	0.277	NS	0.001*	NS	0.852	NS
Leukocyte count (>11)	0.462	NS	0.190	NS	0.022*	NS	0.082	NS
BMI (≥35)	0.463	NS	0.460	NS	0.375	NS	0.020*	Sig.
Stage of cancer (early/advanced)	0.077	NS	0.115	NS	0.009*	NS	0.004*	NS
Khorana score** (low risk/high risk)	0.530	-	0.658	-	<0.001*	-	0.807	-

*statistically significant at the $p<0.05$ level; Sig.: remained statistically significant at the $p<0.05$ level in stepwise regression; NS: not significant in stepwise regression

**Khorana score not calculated for patients with abdominal VTE

Figure 1: STROBE diagram to illustrate patient eligibility for the potentially preventable VTE risk factor analysis

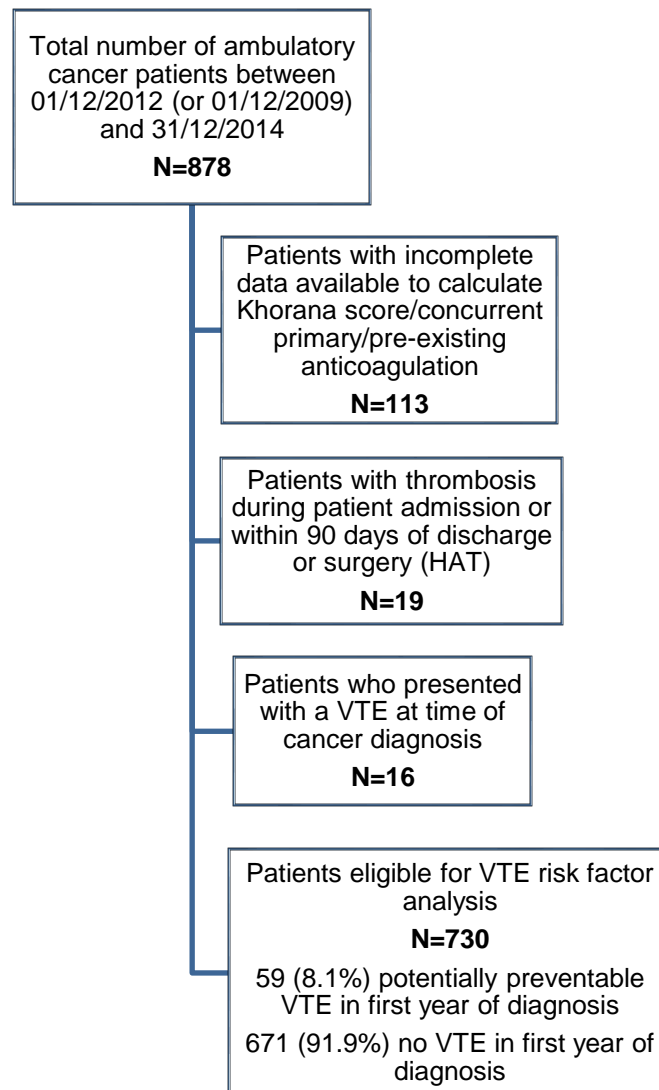


Figure 2. Total VTE (A) and potentially preventable VTE (B) rates for tumour groups. (A) Total VTE rates in the first year of diagnosis were 26.8% in the pancreatic cancer cohort; 5.7% endometrial cancer; 9.8% colorectal cancer and 10.2% in ovarian cancer. No non-hospital associated VTE were identified in the cervical cancer cohort. (B) Excluding VTE present at diagnosis, the rates of VTE in the first year that were potentially preventable with thromboprophylaxis were 16.5% in pancreatic cancer; 3.8% endometrial cancer; 9.8% colorectal cancer and 8.7% in the ovarian cancer cohort.

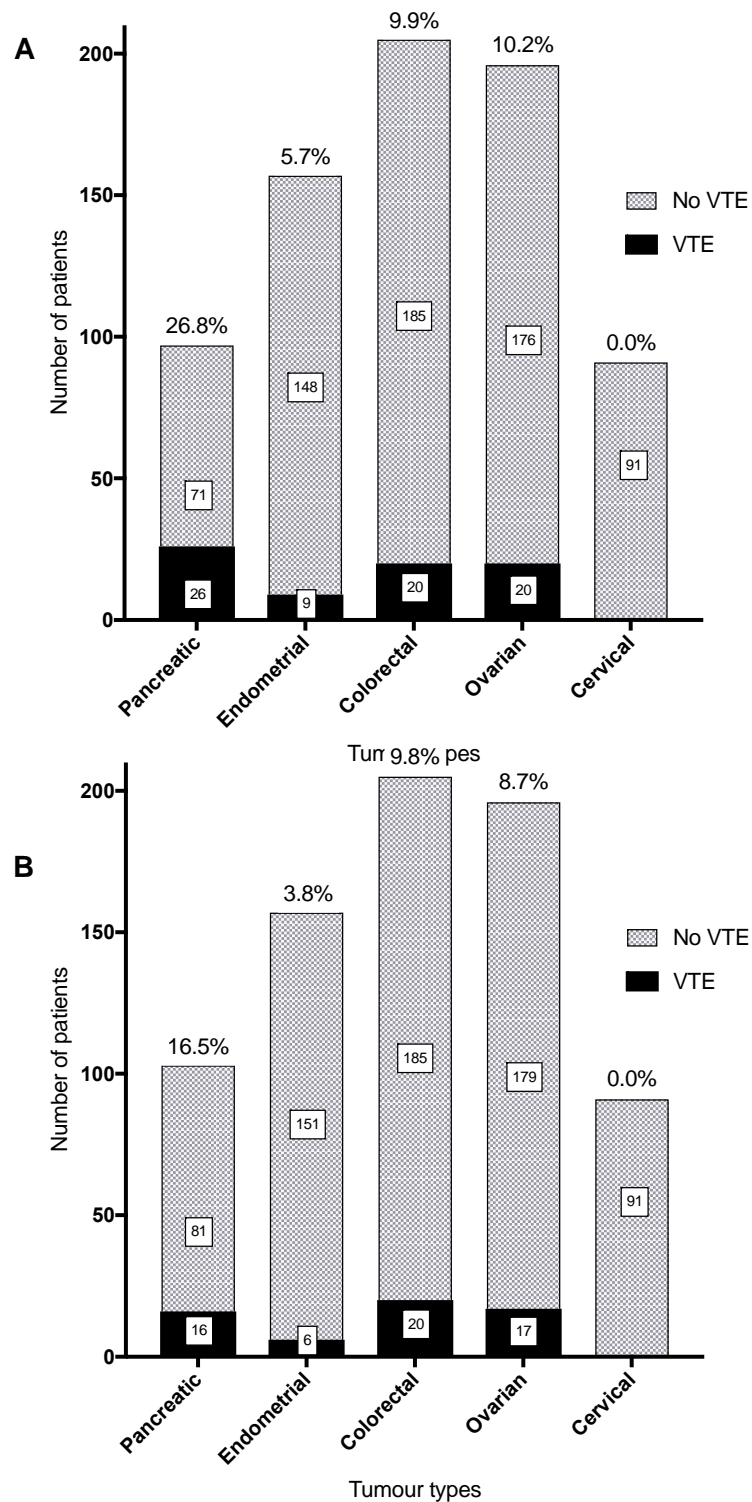


Figure 3A-D VTE rate by low risk (<3) and high risk (≥ 3) Khorana score in pancreatic (A), endometrial (B), colorectal (C) and ovarian (D) cancer patients. Cervical cancer cohort not included as no VTE events. High risk Khorana score predicted VTE in endometrial cancer [VTE rate high-risk Khorana: 4/24 (16.7%) vs. low-risk: 2/130 (1.5%); $p<0.001$] but not in other cancer groups.

